

What is claimed is:

1. A method for permanently dyeing hair which comprises subjecting said hair to a number of treatments, having a set time interval between each two consecutive such treatments, wherein each treatment comprises steps a.) and b.) Below:

a.) contacting said hair, for a period of about 5 seconds to about 5 minutes with a recently made mixture of:

A) an alkaline composition comprising a dye intermediate in a shampoo base or in a conditioner base; and

B) an acidic composition comprising an oxidizing compound in a shampoo base or in a conditioner base;

b.) rinsing said mixture from said hair with water;

with the proviso that when a conditioner base is present in A above, an independently selected conditioner base is also present in B above; and when a shampoo base is present in A above, an independently selected shampoo base is also present in B above;

and wherein said number of treatments is between about 2 to about 30; and wherein said set time interval between each two consecutive treatments is between about 8 hours and 30 days.

2. A method according to claim 1 or claim 2, wherein said conditioner base in a.) i.) comprises a conditioning agent independently selected from the group consisting of: dicetyl dimonium chloride; propylene glycol; poly(dimethyldiallylammonium chloride); Quaternium 57; poly(dipropyldiallylammonium chloride); poly(methyl-beta-propaniodiallylammonium chloride); poly(diallylpiperidinium chloride); poly(vinylpyridinium chloride); quaternised poly(vinyl alcohol); quaternised poly(dimethylaminoethylmethacrylate); poly (N-vinylpyrrolidone);

poly(dimethylaminoethylmethacrylate); poly(vinyl pyridine); poly(ethyleneimine);  
 and mixtures thereof; and wherein said conditioner base in a.) ii.) comprises a  
 conditioning agent independently selected from the group consisting of: dicetyl  
 dimonium chloride; p[ropylene glycol; poly(dimethyldiallylammonium chloride);  
 5 Quaternium 57; poly(dipropyldiallylammonium chloride); poly(methyl-beta-  
 propaniodiallylammonium choride); poly(diallylpiperidinium chloride);  
 poly(vinylpyridinium chloride); quaternised poly(vinyl alcohol); quaternised poly  
 (dimethylaminoethylmethacrylate); poly (N-vinylpyrrolidone);  
 poly(dimethylaminoethylmethacrylate); poly(vinyl pyridine); poly(ethyleneimine);  
 10 and mixtures thereof.

3. A method according to claim 1 wherein said alkaline composition A comprises:

- 15 A.) from about 0.05 % to about 1.0% of an oxidation hair dye intermediate;  
 B.) from about 0.1% to about 0.5% of a coupler; and  
 C.) from about 1 % to about 90 % of a conditioner base.

20 4. A method according to claim 1 wherein said acidic composition B which  
 comprises:

- A.) from about 1 % to about 90 % of a conditioner base;  
 B.) from about 0.5% to about 2.5% of a volatile silicone; and  
 25 C.) from about 0.1 % to about 5 % of an oxidative compound.

5. A method according to claim 1 wherein said period for contacting said hair is  
 between about 1 minute and 3 minutes.

6. A method according to claim 1 wherein said set time interval is between about 1 day and about 3 days.

7. A method according to claim 1 wherein said hair has wet combing tensile strength maintained.

8. A method according to claim 1 wherein said oxidative compound is selected from the group consisting of hydrogen peroxide, urea peroxide, melamine peroxide, sodium perborate and sodium percarbonate.

9. A method for maintaining hair color through the use of a permanent hair dye which comprises subjecting said hair to successive treatments, having a set time interval between each two consecutive such treatments, wherein each treatment comprises steps a.) and b.) below:

a.) contacting said hair, for a period of about 5 seconds to about 5 minutes with a recently made mixture of:

A) an alkaline composition comprising a dye intermediate in a shampoo base or in a conditioner base; and

B) an acidic composition comprising an oxidating compound in a shampoo base or in a conditioner base;

b.) rinsing said mixture from said hair with water;

with the proviso that when a conditioner base is present in A above, an independently selected conditioner base is also present in B above; and when a shampoo base is present in A above, an independently selected shampoo base is also present in B above;

and wherein said set time interval between each two consecutive treatments is between about 8 hours and 30 days.

- 5 10. A method according to claim 1 wherein said oxidative hair dye intermediate is present at about 0.1% to about 1%.
- 10 11. A method according to claim 1 wherein said oxidative compound is present at about 2 % to about 5 %.
12. A composition for permanently dying hair which comprises a mixture of:  
Part A
- 15 a) about 0.1% to about 99.9% of a conditioning base, which comprises about 0.5% to about 5% of a quaternary nitrogen-containing conditioning agent based upon the total composition;
- b) about 0.5 to about 10 % of a long chain fatty alcohol having about 11 to about 18 carbons in said long chain,
- 20 c) about 0.1% to about 1% of an oxidation hair dye; and
- d) about 1% to about 4% of a volatile silicone;
- Part B
- 25 a) about 1 to about 5% of a conditioning base;
- b) about 1 to about 5% of an oxidative compound.

13. A composition according to claim 12 wherein said shampoo base in part A comprises about 5 to about 50%, based on the total part A composition, of an anionic surfactant, an amphoteric surfactant, or a mixture of an anionic surfactant and an amphoteric surfactant.

14. A method according to claim 1 wherein said hair has combing force in the range of 5 to 55 gm force,

15. A method according to claim 1 wherein said hair has combing force in the range of about 5 to 10 gm force.

16. A method according to claim 1 wherein said hair has combing index in the range of about 1.1 to 4.0.

17. A method according to claim 1 wherein said hair has combing index in the range of about 1.2 to 3.5.

18. A method according to claim 1 wherein said hair has break stress in the range of 0.005 to 0.03 gm force/micron.

19. A method according to claim 1 wherein said hair has break stress in the range of 0.005 to 0.025 gm force/micron.

20. A method according to claim 1 wherein said hair has break stress in the range of about 0.005 to 0.018 gm force/micron.

5 21. A method according to claim 1 wherein the ratio IR absorption at 1040/1240 is in the range of 0.01 to 1.5

10 22. A method according to claim 1 wherein the ratio IR absorption at 1040/1240 is in the range of 0.01 to 1.0.

15 23. A method according to claim 1 wherein the ratio IR absorption at 1040/1240 is in the range of 0.01 to 0.5

24. A method according to claim 1 wherein said hair minimize color fading.

20 25. A method according to claim 1 wherein said hair minimize root outgrowth.

25 26. A method according to claim 1 wherein color added to said hair is about 4 to about 8% per treatment.

27. A method according to claim 1 wherein color fading to said hair is about 0 to about 10% per week.

28. A method according to claim 1 wherein said composition delivers delta E of 0.1 to 65 on blonde hair

5 29. A method according to claim 1 wherein said composition delivers delta E of 0.1 to 8 on brown hair.

10 30. A method for permanently dyeing hair which comprises subjecting said hair to a treatment which comprises steps a.) and b.) below:

a.) contacting said hair, for a period of about 5 seconds to about 5 minutes with a recently made mixture of:

A) an alkaline composition comprising a dye intermediate in a shampoo base or in a conditioner base; and

15 B) an acidic composition comprising an oxidizing compound in a shampoo base or in a conditioner base;

b.) rinsing said mixture from said hair with water;

20 with the proviso that when a conditioner base is present in A above, an independently selected conditioner base is also present in B above; and when a shampoo base is present in A above, an independently selected shampoo base is also present in B above;

and wherein said treatment causes said hair a delta E of about 0.1 to about 40.